

Senate File 302 - Reprinted

SENATE FILE 302
BY COMMITTEE ON TRANSPORTATION

(SUCCESSOR TO SSB 1128)

(As Amended and Passed by the Senate April 2, 2019)

A BILL FOR

- 1 An Act relating to motor vehicles operated by an automated
- 2 driving system, and making penalties applicable.
- 3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. NEW SECTION. **321.514 Definitions.**

2 As used in this section and sections 321.515 through
3 321.519, unless the context otherwise requires:

4 1. *"Automated driving system"* means the hardware and
5 software collectively capable of performing all dynamic driving
6 tasks on a sustained basis, regardless of whether the system is
7 limited to a specific operational design domain, if any.

8 2. *"Conventional human driver"* means a natural person
9 who manually controls the in-vehicle accelerating, braking,
10 steering, and transmission gear selection input devices in
11 order to operate a motor vehicle.

12 3. *"Driverless-capable vehicle"* means a system-equipped
13 vehicle capable of performing all dynamic driving tasks within
14 the automated driving system's operational design domain, if
15 any, including but not limited to achievement of a minimal risk
16 condition without intervention or supervision by a conventional
17 human driver.

18 4. *"Dynamic driving task"* means any real-time operational
19 and tactical function required to operate a motor vehicle on
20 a highway in traffic within an automated driving system's
21 specific operational design domain, if any. *"Dynamic driving
22 task"* does not include any strategic function such as trip
23 scheduling or the selection of destinations and waypoints.

24 5. *"Minimal risk condition"* means a reasonably safe state
25 to which an automated driving system brings a system-equipped
26 vehicle upon experiencing a performance-relevant failure of the
27 system that renders the system unable to perform any dynamic
28 driving task, including but not limited to removing the vehicle
29 to the nearest shoulder if the vehicle is capable of doing so,
30 bringing the vehicle to a complete stop, and activating the
31 vehicle's emergency signal lamps.

32 6. *"On-demand driverless-capable vehicle network"* means a
33 transportation service network that uses a software application
34 or other digital means to dispatch driverless-capable vehicles
35 for the purposes of transporting persons or goods, including

1 transportation for hire as defined in section 325A.1, and
2 public transportation.

3 7. "*Operational design domain*" means a set of constraints
4 used to define the domain under which an automated driving
5 system is designed to properly operate, including but not
6 limited to types of highways, speed ranges, environmental
7 conditions such as weather or time of day, and other
8 constraints.

9 8. "*System-equipped vehicle*" means a motor vehicle equipped
10 with an automated driving system.

11 Sec. 2. NEW SECTION. 321.515 **Operation.**

12 1. A driverless-capable vehicle may operate on the public
13 highways of this state without a conventional human driver
14 physically present in the vehicle, if the vehicle meets all of
15 the following conditions:

16 a. The vehicle is capable of achieving a minimal risk
17 condition if a malfunction of the automated driving system
18 occurs that renders the system unable to perform any dynamic
19 driving task within the system's intended operational design
20 domain, if any.

21 b. While in driverless operation, the vehicle is capable of
22 operating in compliance with the applicable traffic and motor
23 vehicle safety laws and regulations of this state that govern
24 the performance of dynamic driving tasks, unless an exemption
25 has been granted to the vehicle by the department.

26 c. The vehicle has been certified by the vehicle's
27 manufacturer to be in compliance with all applicable federal
28 motor vehicle safety standards, except to the extent an
29 exemption has been granted for the vehicle under applicable
30 federal law or by the national highway traffic safety
31 administration.

32 2. a. The operation of a system-equipped vehicle capable
33 of performing all dynamic driving tasks within the automated
34 driving system's operational design domain on the public
35 highways of this state while a conventional human driver is

1 present in the vehicle shall be lawful. During such operation,
2 the conventional human driver shall possess a valid driver's
3 license pursuant to section 321.174. The conventional human
4 driver shall operate the system-equipped vehicle according
5 to the manufacturer's requirements and specifications, and
6 shall regain manual control of the vehicle when prompted by the
7 automated driving system.

8 *b.* An automated driving system, while engaged, shall be
9 designed to operate within the system's operational design
10 domain in compliance with the applicable traffic and motor
11 vehicle safety laws and regulations of this state that govern
12 the performance of dynamic driving tasks, unless an exemption
13 has been granted to the vehicle by the department.

14 3. Except as provided in this section, the motor vehicle
15 laws of this state shall not be construed to require a
16 conventional human driver to operate a driverless-capable
17 vehicle that is being operated by an automated driving system.
18 The automated driving system, while engaged, shall be deemed
19 to fulfill any physical acts required of a conventional human
20 driver to perform dynamic driving tasks.

21 Sec. 3. NEW SECTION. 321.516 Insurance.

22 Before a system-equipped vehicle is allowed to operate on
23 the public highways of this state, the owner shall submit to
24 the department proof of financial liability coverage for the
25 vehicle in a manner and form determined by the department. A
26 system-equipped vehicle shall not operate on the highways of
27 this state unless financial liability coverage is in effect for
28 the vehicle and unless proof of financial liability coverage is
29 carried in the vehicle. If a system-equipped vehicle operates
30 on a highway in violation of this section, the owner of the
31 vehicle may be charged and convicted of a violation of section
32 321.20B as though the owner was operating the vehicle.

33 Sec. 4. NEW SECTION. 321.517 Accidents.

34 In the event of an accident in which a system-equipped
35 vehicle is involved, the vehicle shall remain at the scene of

1 the accident and the operation of the vehicle shall otherwise
2 comply with sections 321.261 through 321.273 where applicable
3 and to the extent possible, and the vehicle's owner or a person
4 on behalf of the vehicle's owner shall promptly report the
5 accident to law enforcement authorities. If a system-equipped
6 vehicle fails to remain at the scene of an accident or the
7 operation of the vehicle fails to otherwise comply with
8 sections 321.261 through 321.273 where applicable and to the
9 extent possible as required by this section, the vehicle's
10 failure shall be imputed to the vehicle's owner, and the
11 vehicle's owner may be charged and convicted of a violation of
12 sections 321.261 through 321.273, as applicable. However, if
13 the vehicle's failure is due to an error or malfunction in the
14 automated driving system, the vehicle's failure shall instead
15 be imputed to the vehicle's manufacturer, and the vehicle's
16 manufacturer may be charged and convicted for a violation of
17 sections 321.261 through 321.373, as applicable.

18 Sec. 5. NEW SECTION. **321.518 On-demand driverless-capable**
19 **vehicle network.**

20 A person may operate an on-demand driverless-capable vehicle
21 network. An on-demand driverless-capable vehicle network may
22 be used to facilitate the transportation of persons or goods,
23 including transportation for hire as defined in section 325A.1,
24 and public transportation. An on-demand driverless-capable
25 vehicle network may connect passengers to driverless-capable
26 vehicles either exclusively or as part of a digital network
27 that also connects passengers to conventional human drivers
28 who provide transportation services, consistent with chapter
29 321N or any other applicable laws, in vehicles that are not
30 driverless-capable vehicles.

31 Sec. 6. NEW SECTION. **321.519 Authority.**

32 1. Automated driving systems and system-equipped vehicles
33 shall be governed by sections 321.514 through 321.518, this
34 section, and all applicable traffic and motor vehicle safety
35 laws and regulations of this state. Automated driving systems

1 and system-equipped vehicles shall be regulated exclusively by
2 the department. The department may adopt rules pursuant to
3 chapter 17A to administer sections 321.514 through 321.518, and
4 this section.

5 2. A political subdivision of the state shall not impose
6 requirements, including but not limited to performance
7 standards, specific to the operation of system-equipped
8 vehicles, automated driving systems, or on-demand
9 driverless-capable vehicle networks that are in addition to
10 the requirements set forth under sections 321.514 through
11 321.518. A political subdivision of the state shall not
12 impose a tax on system-equipped vehicles, automated driving
13 systems, or on-demand driverless-capable vehicle networks
14 where such tax relates specifically to the operation of
15 system-equipped vehicles, automated driving systems, or
16 on-demand driverless-capable vehicle networks.